

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

IN THE CLAIMS:

1. (Currently amended) An automated, patient-controlled, medical and biographical records system comprising:
 - a. a central computer connected to a global computer network;
 - b. a centralized medical and biographical records database maintained at the central computer, said database including medical and biographical records for a plurality of individual patients, access to each of said medical and biographical records in the database being controlled by the corresponding individual patient of said plurality of patients, said central computer executing a security program limiting access to the records to the patients and to health care professionals selectively authorized by the patients;
 - c. one or more patient computers situated remotely from the central computer and connected to the global network, said patient computers each executing a software program interface for patients to input medical history and biographical information into the patient medical and biographical records database and to authorize health care professionals to access at least a portion of the records of the authorizing patients;
 - d. one or more health care computers situated remotely from the central computer and connected to the global network, said health care computers each executing a software program interface for the authorized health care professionals to access the medical history and biographical information from the patient medical and biographical records database and to input additional patient medical history and biographical information into the patient medical and biographical records database.
2. (original) The medical and biographical records system of claim 1, wherein the security program includes a routine permitting a patient to limit the extent and type of information in the patient's record that authorized health care professionals may access.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

3. (original) The medical and biographical records system of claim 2, wherein the security program is responsive to the patient selectively limiting the extent and type of information that the authorized health care professional may access based upon relevancy of the information to the specialty of the health care professional.
4. (original) The medical and biographical records system of claim 2, wherein the security program is responsive to the patient selectively limiting the extent and type of information based upon a degree of confidentiality assigned by the patient to the different medical and biographical information stored in the patient's record for limiting access of the health care professionals to the information.
5. (original) The medical and biographical records system of claim 2, wherein the security program identifies and records all inquiries to access records in the medical and biographical records database.
6. (original) The medical and biographical records system of claim 2, wherein the security program identifies and records the health care professionals or patients who enter and store new information in the medical and biographical records database.
- 7-13. (canceled)
14. (original) A method for entering and retrieving patient medical and biographical record information comprising the steps of:
 - a. maintaining medical, biographical, and security information for a plurality of individual patient records in a medical and biographical records database on a centralized computer;
 - b. inputting patient medical and biographical information in the medical and biographical records database through a computer remotely situated from the centralized computer;

Application No. 09/910,190
Attorney Docket No. 60019680-0018
Amendment/Reply to March 2, 2006, Office Action

- c. inputting patient medical and biographical records security information in the medical and biographical records database through the computer remotely situated from the centralized computer;
 - d. executing a security program limiting access to the medical and biographical records database to the individual patients inputting medical and biographical information into their own records and to health care professionals selectively authorized by the patients to input additional medical and biographical information to the patients' records; and
 - e. executing a security program limiting access to the medical and biographical records database to the individual patients retrieving medical and biographical information from their own records and to the health care professionals selectively authorized by the patients.
15. (original) The method of claim 14, further comprising the step of selectively limiting the extent and type of information in a patient's record that authorized health care professionals may access.
16. (original) The method of claim 15, wherein the step of selectively limiting the extent and type of information includes further limiting the extent and type of information that authorized health care professionals may access based upon relevancy of the information to the specialty of the health care professional.
17. (original) The method of claim 16, wherein the security program permits patients to selectively authorize medical and biographical information to be shared between primary and specialist health care professionals.
18. (original) The method of claim 17, further comprising the step of identifying all inquiries to patient records.
19. (original) The method of claim 18, further comprising the step of identifying individuals entering and storing new information in the patient records.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

20. (original) The method of claim 14, wherein the patient medical and biographical information is information selected from the group consisting of patient genetic history, patient social history, patient mental and emotional health history, patient surgical history, patient environmental history, patient dental and oral health history, patient laboratory results, patient radiological and imaging history, patient organ system history, treatment and medication history, patient otologic and ophthalmological history, and anatomical, biochemical, physiological, pathological, and genetic histories.

21. (original) The method of claim 14, further comprising the step of assigning a degree of confidentiality by the patient to the different medical information stored in the patient's record, and wherein the step of selectively limiting the extent and type of information includes further limiting the extent and type of information that authorized health care professionals may access based upon the assigned degree of confidentiality.

22. (original) The method of claim 14, further comprising the step of storing potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record stored on the central computer.

23. (original) The method of claim 22, wherein medical and biographical information is retrieved and utilized by insurance providers to provide insurance services.

24. (original) The method of claim 23, wherein the insurance services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

25. (original) The method of claim 23, wherein the information is retrieved and utilized by a computer and wherein the computer determines whether an insurance claim should be either accepted or rejected.
26. (original) The method of claim 23, wherein a third party intermediary possesses an insurance provider's policy criteria, compares the criteria to a patient's medical and biographical record, and determines whether an insurance claim should be either accepted or rejected.
27. (original) The method of claim 23, wherein the information is retrieved and utilized by a third party computer and wherein the third party computer determines whether an insurance claim should be either accepted or rejected.
28. (original) The method of claim 22, further comprising:
- a. maintaining insurance services wherein the services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment;
 - c. comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis; and
 - d. approving or disapproving payment for the prescribed services or treatments.
29. (original) The method of claim 28, further comprising
- a. maintaining health care coverage information for individual patients identifying patient contribution requirements;
 - b. maintaining health care coverage information for individual patients identifying insurer contribution requirements;
 - c. maintaining financial accounts for health care premiums and payment of health care treatments;

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

- d. paying health care provider for approved services or treatments; and
- e. billing patient and insurer according to their contribution proportions.

30. (original) The method of claim 29, further comprising financially managing accounts in a manner that produce financial benefits to the patient.

31. (original) The method of claim 30, wherein the financial benefits are selected from the group consisting of accrued interest, purchasing of additional insurance, and dividends.

32. (original) The method of claim 29, wherein the insurer is the patient's employer or an insurance company.

33. (original) The method of claim 14, further comprising the following steps:

- a. creating a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a patient;
- b. storing said diagnostic questions on a central computer connected to a global computer network;
- c. differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis;
- d. providing a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer;
- e. retrieving patient responses to the diagnostic questions and correlating the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions and the relative weight of the medical diagnostic questions; and
- f. providing the list of potential medical diagnoses to the patient via the computer network and remote computer.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

34. (original) The method of claim 33, further comprising storing potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record stored on the central computer.
35. (original) The method of claim 33, further comprising providing a health care professional with the patients list of potential medical diagnoses at the patient's request.
36. (original) The method of claim 14, wherein the security program limits access to the medical and biographical records database to health care providers inputting or retrieving medical and biographical information into their own patient records and to health care professionals selectively authorized by the health care provider to input additional medical and biographical information to the patient records.
37. (original) The method of claim 36, wherein medical and biographical information is retrieved and utilized by insurance providers to provide insurance services.
38. (original) The method of claim 37, wherein the insurance services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment.
39. (original) The method of claim 37, wherein the information is retrieved and utilized by a computer and wherein the computer determines whether an insurance claim should be either accepted or rejected.
40. (original) The method of claim 37, wherein a third party intermediary possesses an insurance provider's policy criteria, compares the criteria to a patient's medical and biographical record, and determines whether an insurance claim should be either accepted or rejected.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

41. (original) The method of claim 37, wherein the information is retrieved and utilized by a third party computer and wherein the third party computer determines whether an insurance claim should be either accepted or rejected.
42. (original) The method of claim 36, further comprising:
- a. maintaining insurance services wherein the services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment;
 - c. comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis; and
 - d. approving or disapproving payment for the prescribed services or treatments.
43. (original) The method of claim 42, further comprising
- a. maintaining health care coverage information for individual patients identifying patient contribution requirements;
 - b. maintaining health care coverage information for individual patients identifying insurer contribution requirements;
 - c. maintaining financial accounts for health care premiums and payment of health care treatments;
 - d. paying health care provider for approved services or treatments; and
 - e. billing patient and insurer according to their contribution proportions.
44. (original) The method of claim 43, further comprising financially managing accounts in a manner that produce financial benefits to the patient.
45. (original) The method of claim 44 wherein the financial benefits are selected from the group consisting of accrued interest, purchasing of additional insurance, and dividends.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

46. (original) The method of claim 43, wherein the insurer is the patient's employer or an insurance company.
47. (original) The method claim 36, further comprising the following steps:
- a. creating a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a health care provider;
 - b. storing said diagnostic questions on a central computer connected to a global computer network;
 - c. differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis;
 - d. providing a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer;
 - e. retrieving responses to the diagnostic questions and correlating the responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions and the relative weight of the medical diagnostic questions; and
 - f. providing the list of potential medical diagnoses via the computer network and remote computer.
48. (original) The method of claim 47, further comprising storing potential medical diagnoses, at the option of the health care provider, to the health care provider's medical and biographical patient record stored on the central computer.
49. (currently amended) An automated medical diagnosis method comprising the following steps:
- a. creating a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a patient;
 - b. storing said diagnostic questions on a central computer connected to a global computer network;

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

- c. differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis;
- d. providing a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer;
- e. retrieving patient responses to the diagnostic questions and correlating the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions and the relative weight of the medical diagnostic questions; and
- f. providing storing the list of potential medical diagnoses to the patient a medical and biographical records database via the computer network and remote computer, said computer network including a security program limiting access to the medical and biographical records database to the individual patient to whom the diagnosis relates and to health care professionals selectively authorized by the patient to access the records.

50. (original) The method of claim 49, further comprising the step of storing potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record stored on the central computer.

51. (original) The method of claim 49, further comprising the step of identifying a relative likelihood for each listed potential diagnosis based upon the responses and the relative weight of the questions.

52. (original) The method of claim 49, wherein the responses to the questions are weighted based on data acquired from one or more of the patient's organ system medical history, social history, family history, genealogy history, genetic constitution, laboratory and imaging tests, medications, and surgical therapies.

53. (original) The method of claim 49, further comprising the steps of collecting patient health data via sensors connected to the remotely situated computers and

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

correlating the patient health data to potential diagnoses as a function of the collected patient health data, responses to the medical diagnostic questions, and the relative weight of the medical diagnostic questions, wherein the patient health data is selected from the group consisting of anatomical, biochemical, physiological, pathological data and a combination thereof.

54. (original) The method of claim 49, further comprising the step of generating images illustrating the physical location of a medical condition and limitations of function resulting from the medical condition wherein the generated images are selected from the group consisting of three-dimensional images, holographic images, diagrams, models, pictures and illustrations.

55. (original) The method of claim 49, further comprising the steps of identifying the location of a medical condition and correlating the location to a list of potential diagnoses as a function of the location, the responses to the medical diagnostic questions, and the relative weight of the medical diagnostic questions.

56. (original) The method of claim 49, further comprising the steps of:

- a. collecting patient health data via sensors connected to the remotely situated computers;
- b. storing the collected patient health data to memory to form a library of patient data records measured over time;
- c. comparing the collected patient health data to the library of patient health data records; and
- d. correlating any variation between the collected patient health data and the library of patient health data records, the degree of variation between the collected patient health data and the library of patient health data records, responses to the medical diagnostic questions, and the relative weight of the medical diagnostic questions to potential diagnoses.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

57. (original) The method of claim 56, wherein the patient health data is selected from the group consisting of anatomical, biochemical, physiological and pathological data.

58. (original) The method of claim 56, wherein the patient data is selected from the group consisting of heart rate, blood pressure, EKGs, EEGs, respiratory rate, temperature, metabolic profiles, organ system function tests, anatomical data, biochemical data, physiological data, pathological data, laboratory data, and radiologic and imaging data.

59. (original) The method of claim 49, further comprising the steps of:

- a. collecting patient health data via sensors connected to the remotely situated computers;
- b. comparing the collected patient health data to a library of stored health data; and
- c. correlating the degree to which the collected patient health data is related to the stored health data, responses to the medical diagnostic questions, and the relative weight of the medical diagnostic questions to potential diagnoses;

wherein the health data is data selected from the group consisting of anatomical, biochemical, physiological, pathological data and a combination thereof.

60. (original) The method of claim 49, further comprising the steps of providing a list of therapeutic recommendations to treat the diagnosed condition.

61. (original) The method of claim 60, further comprising:

- a. selecting a therapy from the list of therapeutic recommendations;
- b. storing the selected therapy to a patient's medical and biographical record; and
- c. providing a predicted patient outcome in response to the selected therapy.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

62. (original) The method of claim 61, further comprising the steps of receiving actual patient outcome data in response to the selected therapy and storing the actual patient outcome data to a patient medical and biographical record.
63. (original) The method of claim 49, further comprising the step of providing to the patient referral information of one or more health care professionals or institutions who have identified themselves as being able to treat individuals having the same or similar conditions as those identified by the list of potential medical diagnoses.
64. (original) The method of claim 63, further comprising the step of providing the patient with information rating the referred health care professionals institutions in treating the same or similar conditions as those identified by the list of potential medical diagnoses.
65. (original) The method of claim 64, further comprising providing the patient with referral information for one or more insurance providers.
66. (original) The method of claim 65, further comprising providing the patient with insurance provider registration information.
67. (original) The method of claim 66, further comprising the step of providing the patient with information rating the coverage provided by the referred insurance providers in covering health care expenses.
68. (original) A health care finance and insurance method comprising:
- a. maintaining medical, biographical, diagnostic, and treatment records for a plurality of individual patients in a medical and biographical records database on a centralized computer;
 - b. restricting access to each of said medical, biographical, diagnostic and treatment records in the database to the patients to whom the records relate and to individuals and institutions selectively authorized by the patients;

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

bc. maintaining insurance services wherein the services are selected from the group consisting of terms of Insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment;

ed. comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis; and

de. approving or disapproving payment for the prescribed services or treatment.

69. (original) The health care finance and insurance method of claim 68, further comprising:

- a. maintaining health care coverage information for individual patients identifying patient contribution requirements;
- b. maintaining health care coverage information for individual patients identifying insurer contribution requirements;
- c. maintaining financial accounts for health care premiums and payment of health care treatments;
- d. paying health care provider for approved treatments; and
- e. billing patient and insurer according to their contribution proportions.

70. (original) The health care finance and insurance method of claim 69, further comprising financially managing accounts in a manner that produce financial benefits to the patient.

71. (original) The method of claim 70 wherein the financial benefits are selected from the group consisting of accrued interest, purchasing of additional insurance, and dividends.

72. (original) The method of claim 69, wherein the insurer is the patient's employer or an insurance company.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

73. (new) The medical and biographical records system of claim 1, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.

74. (new) The medical and biographical records system of claim 73, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.

75. (new) The medical and biographical records system of claim 1, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.

76. (new) The method of claim 14, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.

77. (new) The method of claim 76, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.

78. (new) The method of claim 14, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

79. (new) The method of claim 49, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.

80. (new) The method of claim 79, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.

81. (new) The method of claim 49, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.

82. (new) The method of claim 68, wherein access to each of said medical, biographical, diagnostic and treatment records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.

83. (new) The method of claim 82, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.

84. (new) The method of claim 68, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.

85. (new) The medical and biographical records system of claim 2, wherein the security program permits patients to selectively authorize medical and biographical information to be shared between primary and specialist health care professionals.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

86. (new) The medical and biographical records system of claim 1, wherein the patient medical and biographical information is information selected from the group consisting of patient genetic history, patient social history, patient mental and emotional health history, patient surgical history, patient environmental history, patient dental and oral health history, patient laboratory results, patient radiological and imaging history, patient organ system history, treatment and medication history, patient otologic and ophthalmological history, and anatomical, biochemical, physiological, pathological, and genetic histories.

87. (new) The medical and biographical records system of claim 2, wherein the security program permits the patient to assign a degree of confidentiality to the different medical information stored in the patient's record, and the security program selectively limits the extent and type of information that authorized health care professionals may access based upon the assigned degree of confidentiality.

88. (new) The medical and biographical records system of claim 1, wherein at the patient's medical and biographical record selectively includes potential medical diagnoses at the option of the patient.

89. (new) The medical and biographical records system of claim 1, wherein medical and biographical information is retrievable by insurance providers to provide insurance services.

90. (new) The medical and biographical records system of claim 1, wherein medical and biographical information is retrievable by a third party intermediary possessing an insurance provider's policy criteria for comparing the criteria to a patient's medical and biographical record and determining whether an insurance claim should be accepted or rejected.

Application No. 09/910,190
Attorney Docket No. 60019660-0018
Amendment/Reply to March 2, 2006, Office Action

91. (new) The medical and biographical records system of claim 1, wherein said central computer executing a diagnostic program that creates a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a patient, stores said diagnostic questions on a central computer, differentially weights the diagnostic questions and responses according to their relative importance in determining a medical diagnosis, provides a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer, retrieves patient responses to the diagnostic questions and correlates the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions and the relative weight of the medical diagnostic questions, and provides the list of potential medical diagnoses to the patient via the computer network.

92. (new) The medical and biographical records system of claim 91, wherein the diagnostic program stores potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record.

93. (new) The medical and biographical records system of claim 91, wherein the diagnostic program provides a health care professional with the patients list of potential medical diagnoses at the patient's request.

94. (new) The medical and biographical records system of claim 1, wherein the security program limits access to the medical and biographical records database to health care providers inputting or retrieving medical and biographical information into their own patient records and to health care professionals selectively authorized by the health care provider to input additional medical and biographical information to the patient records.